POTOMAC VALLEY RADIO CLUB

est. 1947

President - Fred Laun K3ZO

Vice President - John Pescatore WB2EKK
Secretary - Roger Kaul K3TM

Vice President - Don Daso WA8MAZ
Treasurer - Bill Hider N3RR

The Potomac Valley Radio Club meets the second Monday of each month, from September through May. All radio amateurs interested in contesting and HF operating are invited to attend and apply for membership. Meetings alternate between College Park and Temple Hills MD. Anyone on the 147.00 repeater can provide directions or other information.

PVRC members have established a packet radio based DX spotting system on 145.51 (WØYVA), .57 (N2FB), .59 (W3LPL), and .63.(K3NA). Try it out and contact KN3P to support the system.

February Bulletin

DIRECTIONS TO THE FEBRUARY PVRC MEETING
Monday 12 February 7:30 PM

From Maryland: Take your favorite road to the Washington Beltway 495 and head towards Andrews Air Force Base. Exit onto Rt 5 East, Branch Avenue. Stay in the right lane and turn right at the first traffic light. About 200 feet after the turn the entrance to the Church parking lot will be on the left, with a small blue sign. Turn left there, parking is at the top.

From Virginia: Take your favorite road to the Washington Beltway 495 and head towards Maryland on the Outer Loop over the Wilson bridge (unless, of course, it is quicker for you to go the long way around the Inner Loop for some reason). Exit onto Rt 5 East, Branch Avenue. Stay in the right lane and turn right at the first traffic light. About 200 feet after the turn the entrance to the Church parking lot will be on the left, with a small blue sign. Turn left there, parking is at the top.

Dinner after the meeting: Traditionally, pizza is consumed after the meeting at a nearby restaurant. If you can keep from wasting away until after the meeting, join the bull and beer session afterwards. No reservations required, check the Sunday Post listings of Health Department closings to see if the pizza place is open this week.

FROM THE PRESIDENT'S SHACK

We lost one of our longest time members when Karl Medrow W3FA died in late December. During the last sunspot peak Karl's multi-multi station was a big contributor to the Club's scores. I have just been going through some of his old papers and QSL's; lots of memorabilia there. Like Karl, I spent many of my formative years in Madison WS, so some of the momentos involved people I also knew well. The Goddard Radio Club has established a scholarship in his honor through FAR. Details elsewhere in the bulletin. Our sympathies to Muriel.

You may have seen some news about a Cancer Research Fund in honor of Mike KC8C in the Contest Column of CQ magazine. Jim W4RX, who was involved in setting up the fund, asked that I mention the fund here.

Those attending the February meeting will be rewarded with the latest edition of the Cookbook for the ARRL DX contest. WB2EKK and WA8MAZ have put a lot of work into this effort, and I think you will find the new format interesting. Remember, you can't get this one through the mail, you can only get it at the meeting.

PVRC caps are once again in stock. Contact Don Daso if you want one.

As many of you know, I have unexpectedly gone back to work. I really noticed it the second day of the CW contest, too! Sorry I won't see you at the February meeting; Somporn and I are making our annual trek to Thailand. Back by the ARRL CW weekend, however. I don't expect to do much operating from over there (*uh huh, Fred has been on from HSØB every morning from 1100-1200Z on 20 CW! - EKK*), thought I may get on from HSØB, HSØE, or HSØF if the opportunity presents itself.

Most of the predictions on the sunspot cycle said we would reach the peak just about now, so enjoy these conditions while you can. I have been enjoying six meters, though the line noise on that band can be excruciating. Lots of good openings to Europe in the past few months, and some have even caught Japan, though not your's truly.

Good luck in the ARRL DX test, and please remember to credit PVRC on your summary sheet.

73 Fred K3ZO

GET ON THE AIR!
by WA8MAZ

With the increase in sunspots, the bands are really jumping. Contests represent an excellent way to accomplish several goals: check antennas, improve operator skills, have a good time, compete with someone else or your own previous best, work new countries, and contribute to the Club's combined score. This final point is what I would like to address in some detail.

Currently, on sheer numbers alone, we are not competitive with YCCC or FRC, the other "unlimited" category contest clubs. But we do have a long standing tradition (being one of the first) as an outstanding contest club. That alone should require all of us to contribute something in the way of a score. NO SCORE IS TOO SMALL; no one should be embarrassed to submit any size score.

Where we could indeed be competitive is in our multi-single entries. While the individuals

might not actually win the category (although, in the ARRL you could do just that), these type of efforts would go a long way to pushing our combined club score back up near the top. And the little guys need to submit logs. Its those couple hundred Qs on Sunday afternoon that aren't counted that hurt the Club's total score.

So, here's the pitch: Why not band together for some multi-single fun? There's certainly enough good fun had by members at the meetings to imply that they might have fun together in a hamshack - operating! And for those who don't do that, how about getting on for a few contacts - just a few - and submitting a score? If you don't feel like driving over to operate at someone else's house, and you can't or don't want to put in a lot of hours, get on the air and have some fun. In fact, two more recent operating aids can make part time operating a lot more fun: packet spotting, and computer logging.

Those of us who can remember DXing and contesting the "way they were" are likely to be amazed by the packet system. I know I am. I can remember the "secret" feelings one used to experience on the low end of the band, inching the big HRO knob slowly up from .001, straining to hear what was under that static and the loud VE. Once you found something, you worked it and that was that. You sent for the card and you waited it out. Maybe you mentioned it at a club meeting. You sure didn't call it out on 2 meters (2 meters? That was the place for the Benton Harbor Lunchbox, or maybe moonbounce, Ed Tilton not withstanding), let alone packet.

So I'm constantly amazed by the networking aspect of the system — the seeming total willingness to share. (If only we had some of that on the 3Y5X transmit frequency of late...) What does this all mean for you? As a contest op? Plenty. N3RR has proven that our system can provide you with a million points - your's for the asking, without even calling CQ.
While some may feel that packet is "cheating",

CONTEST CALENDAR

Jan 27 - Feb 4	Novice Roundup
February 4	NA CW Sprint
February 11	NA SSB Sprint
Feb 17-18	ARRL DX CW
Feb 23 - 25	CQ WW 160 SSB
Mar 3-4	ARRL DX SSB

or that it takes away all the fun (I agree to some of this; where's the big vernier dial, after all?) I'd suggest that the contest op has always been different anyway. He's interested in different things: competing, the thrill of the chase, large numbers (of countries, zones, antenna elements, etc.), and efficiency.

Packet putouts can make you an efficient operator. They can help guarantee that you "clean up" a band — that you work all those wonderful multipliers. And the system can help you learn things, as well. Especially if you take the time to analyze your logs after the contest, keeping in mind some questions about propagation, scrutinizing your rate sheet, and so forth. So give the new category — Single Op, Assisted — a try. You'll help yourself. And the Club.

As far as computer logging goes, in my short time in Maryland I've somehow acquired a reputation. No, no, not that kind. But about computers. Somehow, I'm supposedly frightened of them, or I hate them. Something. Neither one is true, although I do cross myself when I drive by N3GB's place of employment on the UM campus...

But I'm here to tell you that having the K1EA CT software available is indeed akin to running a race with the right gear on — its that basic, its that good. And easy, too. I learned (if that's what happened) how to operate with it in 15 minutes before the opening of CQ WW SSB at W3LPL. As a teacher, I was worried about the process. But its so user friendly that you really only need a cheat sheet for the various function keys to get you up and running. Literally, you're running guys with this software right out of the box.

It takes 48 hours for the real miracle. At the contest's end, you punch a couple of keys and you have a complete submission. Done. Finished. Ready to mail to Hicksville or Newington. So if you have an IBM compatible, get this software. And get active with it in contests. You'll never go back to pen and paper. Instead of squinting over dupe sheets, you'll be challenging the little rate meter on the screen. Instead of wondering whether you need ISØ on 40 on Sunday, you'll be hitting a few keys and eating bon-bons. Its that good, and that much fun. Thanks to K1EA...

JANUARY MEETING

The meeting was called to order at 0040 Z by K3ZO. Fred began with the sad news that Karl Medrow W3FA passed away. Karl had been a member since 1949 and his station was among the top multi-ops in the country for many of those years. W1WY and G4CP passed away recently, also.

Treasurer Bill Hider N3RR read the financial report. The Club is in good shape, but payment of the 1990 dues are being accepted now. The report will be in the next newsletter. To expedite transfer of the bank account from one administration to the next, Bill has suggested we apply for private, non-profit status. This will cost $40 to 50.

Don plans to show a movie at the February meeting, and there will be a callsign trivia quiz. Some discussions of the need to get new, younger members into PVRC was held with the suggestion that we invite SS and Novice Roundup participants in the local area to our meetings. To increase our club score, we need more single and multi-single stations both operating and linked in to the packet cluster for the contest.

PVRCer Tom Warren K3TW/5H1TW is active on 160 (1835) and 80 from Tanzania. The Christmas party this year was very nice and all expressed thanks to Larry for making the arrangements. We hope that we will be able to return there in future years.

Hugh Turnbull W3ABC encouraged all PVRCers to keep envelopes on file at the QSL bureau. The bureau can no longer accept money. Recently reelected as Atlantic Division Director, Hugh explained the petition to move teletype and packet below .100 on the HF bands. This is already causing hot debate among RTTYers. The ARRL will be electing a new president and NTIA has withdrawn its support for the 220 Mhz court case.

T33 and Conway Reef have been approved for DXCC beginning March 1. Remember to count them as countries if they are on in the ARRL contests. Franz Josef Island stations will be using the distinctive prefix 4K2 shortly.

The meeting was adjoined at about 0200 Z. In attendance were K3TM, K3ZO, WA8MAZ, N3RR, ND3A/4W, WB3FSB, KC3D, W3LPL, W6AXX, N2FB,

WB3JRU, AA4XU, K1ZZI, W3GN, W3ZN, W3CPB, K3AV, NV3V, K3ZZ, and W3ABC.

Respectfully submitted by Roger Kaul K3TM
Secretary

KARL MEDROW W3FA - SILENT KEY

Karl Medrow W3FA died on December 26. He was 75 years old. Karl had been suffering from emphysema for the last few years.

W3FA was ARRL SCM for the MDC Section from 1971 to 1985. Karl had been an active member of the Potomac Valley Radio Club continuously since 1949, two years after its founding. First licensed as W9AKT, Karl received the call W3MCG upon moving to the Washington area after World War II. After operating for several years from Temple Hills, MD, he moved to Davidsonville and set up a multi-operator contest station which garnered many points for PVRC in numerous international DX contests. A number of the current members of the Club learned all about contesting and DXing thanks to Karl's invitation to operate at his station.

W3FA also enjoyed participation in CW traffic nets and was active in Maryland section nets right up until the time of his death. Muriel, his widow, reports that he always received a lift from checking into the net even when he was very sick.

Professionally, Karl was an electrical engineer, first with NRL and then with NASA. At the time of his retirement in 1973 he was NASA's Director of Upper Air Research, involved in ionospheric sounding, which was one of NASA's most successful programs.

The Goddard Radio Club (WA3NAN), in which Karl was also much involved, has established a scholarship fund in W3FA's honor. Contribution are tax exempt and can be sent to Karl Medrow Memorial Fund, Goddard Radio Club, P.O. Box 86, Greenbelt MD 20770. Further information on this memorial fund can be obtained from either Frank Bauer KA3HDO or Vikki Gigante Hueber KA3PVS.   K3ZO

PACKETCLUSTER NEWS

The packet system has continued to expand. Almost all the nodes are on seperate frequencies, with a new node at K3NA. Elsewhere in the bulletin is a cheat sheet for using the system. Note that KN3P has taken over membership and dues chores. Contact him for information on supporting the system.

ERRATA

There were some booboos and omissions in the score listings last month, so I've reprinted the updated (and hopefully correct) score listings. There were also some typos in the INFO-HAMS network address. Replace the commas with periods, and ignore equal signs.

STANDARD FILE FORMAT FOR COMPUTERIZED ARRL CONTEST LOGS

In order to make contest log checking easier, the ARRL will accept logs on MS DOS floppy disk. In order to make this a manageable process, the ARRL Contest Branch and K1CC have come up with a standard file format, which is shown elsewhere in the bulletin. If you use this format, you can use any contest logging method (during or after the contest), as long as you can get the logs into this format. The K1EA .res format is not completely compatible, but probably close enough. Since the Contest Branch log checking programs convert the ASCII files to a binary format, anyway, KA1MIS and K1EA are working to see if the .bin output of CT is usable. K3ZJ has provided comments to that effect to the committee.

You don't need an IBM PC to use computer logging for contests. Although the CT program by K1EA is rapidly becoming the de facto standard, there are many decent programs that run on Commodore or Apple II computers. In order to directly submit a log on floppy disk to the ARRL for the upcoming contests you will need to put the data on an MS DOS disk. But you can also directly upload your log from any computer to the League, using their telephone BBS. Unless you own stock in the telephone company, this is not a great idea for a 2000 QSO log, but for a 200 - 500 QSO log, it probably won't cost much more than mailing in log sheets or a disk. It will also allow you to transfer ASCII log files from any computer, so you don't need to be DOS compatible.

The phone number of the BBS is 203-665-0090, and you can run 300/1200/2400 baud (N,8,1). The system is very easy to use, and there is a file explaining how to upload contest logs. Its a fairly interesting BBS in general, with a lot of QST columns uploaded by the various editors and SCMs.

For some time to come, no one will be required to submit logs on disk and the Contest Branch says logs on disk will not be subject to any greater scrutiny than paper logs. They have been hand entering logs into computer checking programs, anyway. Doing it that way took about 4 hours to check a 2000 Q log. Starting with a log on disk reduces that time to about 60 seconds!

MISCELLANEOUS

Look for N3JT/HKØ in the ARRL CW. Jim will be 160 on the hour and 80 on the half hour between 0400 and 0800. Work Jim on all six bands and you will receive a two year extension to your subscription to Radiosport.

Congratulations to Bernie WB3JRU for working all Oblasts. Now comes the fun part: chasing down the last 20 or so QSLs.

Congratulations to K3NA for being appointed to the board for coming up with protocols for HF packet.

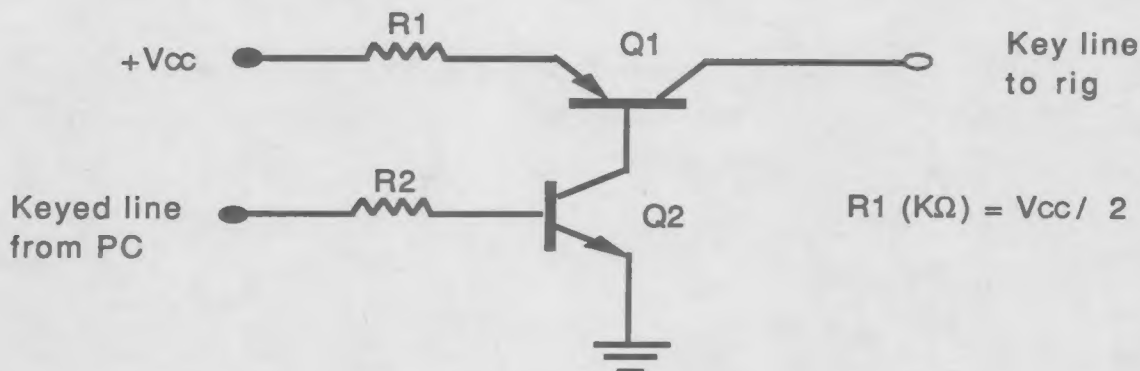## UNIVERSAL KEYING INTERFACE
- Art Boyars K3KU

Here's a circuit which will key either positive or negative voltage lines (i.e. either your +12 VDC transistorized rig or your -60 VDC grid block transmitter).

For -VDC keying, when Q2 is driven "ON" it sinks base current from Q1, which switches on. With both transistors sarturated the key line is within a few tenths of a volt of ground. R1 is chosen so that enough emitter current is supplied from Vcc to drive the key line, typically about 2 ma for grid block keying. For example, for Vcc = +5 and I = 2 ma, R1 should be about 2.2K or so.

For +VDC keying, Q1 does not act as a transistor! Its collector-base junction justs acts as a diode, conducting key line current down to the Q2 collector. The small penalty is that Q2 also has to pull the Vcc/R1 current. This wasted current won't matter unless you are trying to run flea power.

R2 is chosen to get enough base drive to saturate Q2 - it doesn't take much, and even a CMOS output can probably do the trick. Q1 has to have a high enough breakdown voltage rating to handle the -VDC. Q2 only has to be rated at the +VDC. If you have a negative input signal and negative Vcc, just make Q1 NPN and Q2 PNP. Both transistors would need to handle the higher voltage in that case.

K3KU DUAL KEYING INTERFACE

+Vcc ——R1—— Q1 —— Key line to rig

Keyed line from PC ——R2—— Q2

$R1 (K\Omega) = Vcc / 2$

	CQ WW SSB SCORES						CQ WW CW SCORES			
CALL	QSOs	ZONE	CNTRY	SCORE		CALL	QSOs	ZONES	CNTRY	SCORE
N2NT	3078	137	476	5,283,079		K3TUP (K5ZD)	3214	155	432	5,282,530
K3TUP (K3UA)	2900	135	454	4,782,680		N2NT				4,700,000
N6BV/1	2769	134	452	4,543,375		W9RE	3099	141	370	4,434,049
K3OO	2742	130	449	4,445,330		K3NA	3040	124	327	3,838,912
K3ZO	2651	132	425	4,134,500		N6BV/1	2733	128	371	3,818,548
K1DG	2491	133	448	4,052,359		K3ZO	2237	154	391	3,562,120
K5ZD	2418	138	456	4,021,618		W4RX				3,210,000
W0ZV	2173	147	415	3,419,433		WB3JRU	1214	140	360	1,699,600
N5RZ	1932	150	450	3,245,760		K3YGU	1368	127	337	1,600,000
K4VX	1977	151	432	3,227,255		K3DI	1116	110	304	1,335,564
W9RE	1875	141	458	3,144,750		N3II	887	132	343	1,201,750
KP2A (10M)	5640	34	130	2,589,888		N3RR	625			720,000
KE3Q	1527	126	418	2,325,926		W3FG	657	102	248	663,600
KD2RD (10M)	1446	323	130	1,834,106		W3AZ				515,000
KZ3H	1129	127	388	1,628,018		K1ZZI (40)	1278	33	96	461,614
K3NA	1078	118	350	1,412,611		W3GG (40)	960	32	105	368,256
K1ZZI				1,150,344		AA4XU				330,264
N3RR	777	128	384	1,113,907		K4YT/4G8 (10)				271,968
K3ZJ (10)				850,000		N3JT (15)	724	30	101	265,563
K3DI	552	91	240	494,845		K3WS (QRP)				260,000
K3YGU	539	83	239	485,000		KC3AG				14,000
N4MM				289,275		N4MM				12,768
W4EZ				11,424		W3LPL (M/M)	7133	189	618	16,117,727
W3LPL (M/M)	6057	172	691	14,636,135		K1ST (M/M)	6330	178	555	12,991,692
N2RM (M/M)	5251	159	630	11,600,509		KY1H (M/M)	5985	180	565	12,484,710
K2TR (M/M)	4944	154	672	11,434,483		PJ2U (M/S)				13,057,305
N3RR (M/S)	777			1,081,000						

		Have you attended two meetings in the last year?		
		If not, come to the February or March meetings or your score will not count		
		towards the Club's total for the ARRL Contests!		

ARRL INTERNATIONAL DX CONTEST

CW Third FULL weekend in February—Phone First FULL weekend in March

CALL USED _____   CW ☐   ARRL SECTION (p. 8 QST)_____
                             PHONE ☐

Separate logs and summaries must be submitted for each mode of operation.

☐ Novice/Technician

	Valid QSOs	DXCC Countries
160		
80		
40		
20		
15		
10		
Total		

Single operator
- ☐ All band
- ☐ Single band (circle one)
  - 160 80 40 20 15 10
- ☐ QRP (5W or less output)
- ☐ Assisted

Multioperator
- ☐ Single transmitter
- ☐ Two transmitter
- ☐ Unlimited

Multiops list ALL operators:

Please enclose logs, dupe sheets, photos and soapbox comments with your entry and mail within 30 days after the phone contest to: ARRL Contest Branch, 225 Main Street, Newington, CT 06111.

_____ × 3 = _____ × _____ =
      (Valid QSOs)   (QSO Points)   (DXCC Countries)

_____ Claimed Score.

POWER OUTPUT—CHECK ANY USED: ☐ 5 watts or less   ☐ 6-150   ☐ Over 150

YES ■	AFFILIATED CLUB PARTICIPATION	NO ☐
ARRL AFFILIATED CLUB NAME POTOMAC VALLEY RADIO CLUB		(Note: Club secretary must submit list of eligibles in order for club aggregate to be listed. 3 or more entries must be submitted.)

"I have observed all competition rules as well as all regulations established for Amateur Radio in my country. My report is correct and true to the best of my knowledge. I agree to be bound by the decisions of the ARRL Awards Committee."

Date _____   Signature_____   Call _____

NAME:_____   CALL:_____

ADDRESS:_____

1. Check log for duplicate QSOs.
2. Copy ALL QSO info carefully. A penalty is assessed for incorrectly copied QSO info.
3. Observe mailing deadline.
4. Dupe/check sheet must accompany all entries of 500 or more QSOs.

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FAX - 725-1198

Remember ....
Our new 800 order line....
1-800-447-7489

Paid those dues, yet?
Send your $10 check to:
Bill Hider N3RR
10241 Lakewood Drive
Rockville, MD 20850

Potomac Valley Radio Club
John Pescatore
1135 Hornell Drive
Silver Spring, Md. 20904

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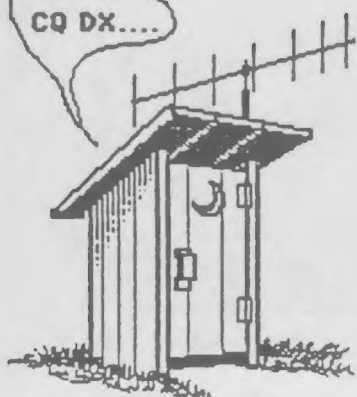
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